Oct. 20, 1964 M. L. STARK ET AL 3,153,256

FIREPLACE SCREEN SUPPORT

Filed July 10, 1963 2 Sheets-Sheet 1

FIG. 1.

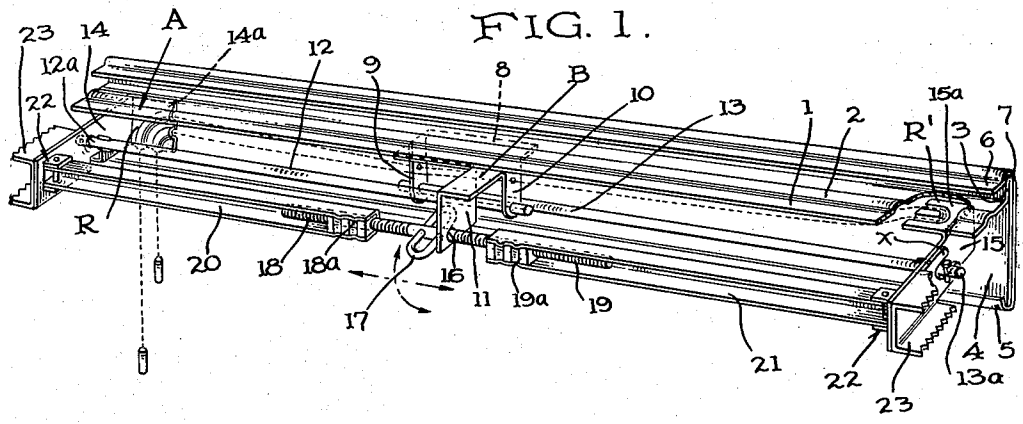


FIG. 2.

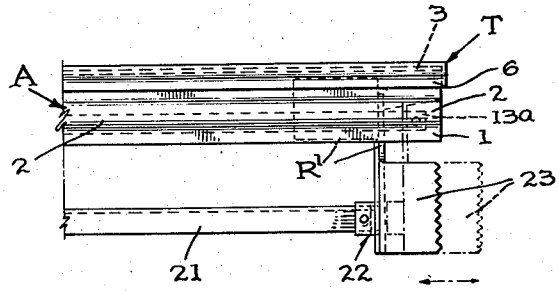


FIG. 5.

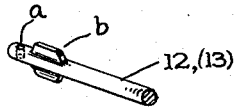


FIG. 3.

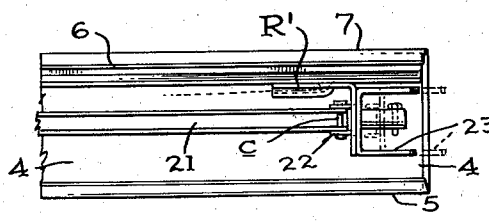
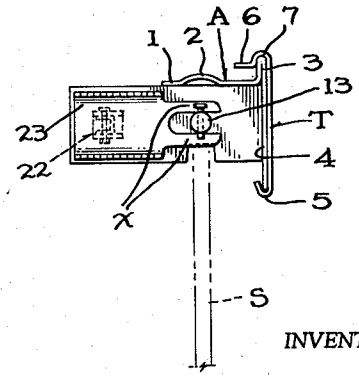


FIG. 6.



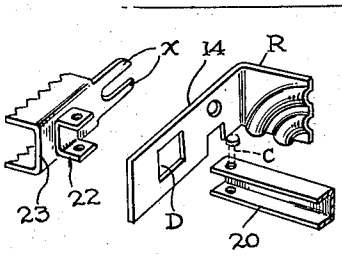


FIG. 4.

INVENTORS

MARVIN L. STARK

FRANK C. LEWIS

BY

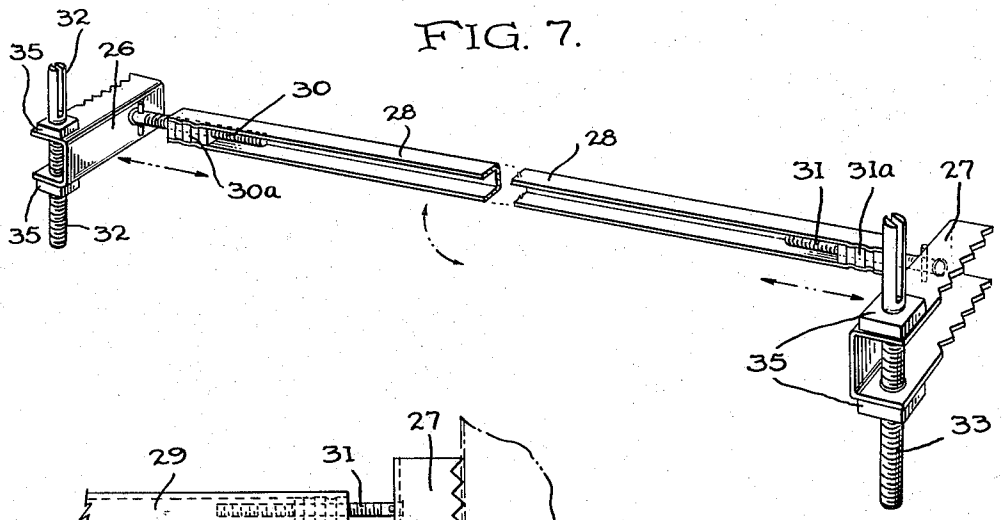
ATTORNEY

Oct. 20, 1964 M. L. STARK ET AL 3,153,256

FIREPLACE SCREEN SUPPORT

Filed July 10, 1963 2 Sheets-Sheet 2

FIG. 7.



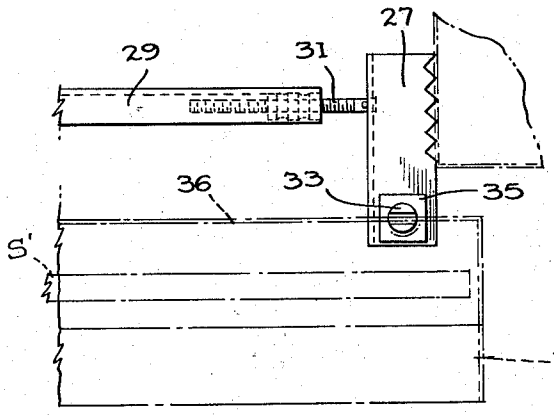


FIG. 8.

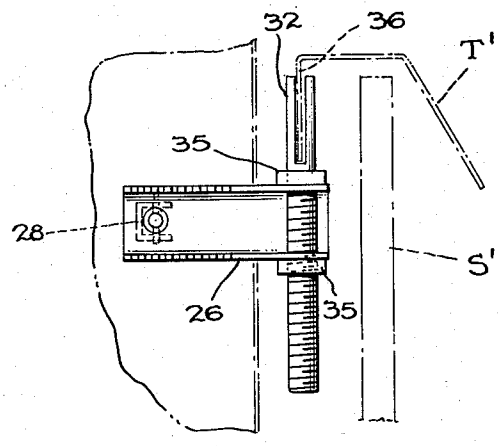


FIG. 9.

INVENTORS

MARVIN L. STARK

FRANK C. LEWIS

BY

ATTORNEY

United States Patent Office 3,153,256 Patented Oct. 20, 1964

3,153,256

FIREPLACE SCREEN SUPPORT

Marvin L. Stark and Frank C. Lewis, Louisville, Ky., assignors to Peerless Manufacturing Division, Dover Corporation, Louisville, Ky., a corporation of Kentucky

Filed July 10, 1963, Ser. No. 294,092
6 Claims. (Cl. 16—87.4)

This invention relates to a support for wire mesh curtain fire screens.

A primary object of the invention is to provide a prefabricated construction, sold as a package, and which may be readily manipulated and installed by the purchaser of the screen, without the assistance of special tools, or the services of a special installer. In that connection, it is proposed to provide a main rail which carries, on its bottom face, a medial bracket having a series of dependent arms, two of which support the inner ends of the rods on which the screen mesh curtains are slidably suspended, while a third arm supports a turnbuckle for selectively adjusting oppositely movable channel members having masonry anchors at their outer ends. The inner ends of these members house the nuts engaging with the turnbuckle, while their outer ends are pinned to spaced tongues secured to the masonry anchors. These tongues project through rectangular openings in the vertical leaf of angular chain-race members. To further assist in preventing any relative angular movement of the channel members under the influence of the turnbuckle, the web portions of the channel shaped masonry anchors have forked or slotted ends to engage with adjacent curtain rods. These curtain rods are longitudinally fixed in vertical flange portions of a pair of chain guide brackets secured to the main rail, while the elongated channel members, carrying the masonry anchors for supporting the assembly in the fireplace, are capable of being moved inwardly and outwardly.

A further object of the invention is to provide a support for the ornamental trim which masks the rods and channels. This trim support, in one form of the invention, has a portion of the main rail for receiving a snap-on trim section, and, in another form, the masonry anchors may be provided with vertically adjustable screws whose upper portions are slotted to receive and support a flange of the trim.

With the above and other objects in view which will more readily appear as the nature of the invention is better understood, the invention consists in the novel construction, combination and arrangement of parts, hereinafter more fully described, illustrated, and claimed.

A preferred and practical embodiment of the invention is shown in the accompanying drawings, in which:

FIGURE 1 is a perspective view of the fireplace screen supporting unit in its entirety.

FIGURE 2 is a detail fragmentary top plan of one end of the construction shown in FIG. 1, illustrating the channel shaped serrated masonry anchors projected in dotted lines.

FIGURE 3 is a bottom plan view of FIG. 2.

FIGURE 4 is a detail exploded perspective view of one of the masonry anchors, its related chain raceway and a portion of the adjustable channel member.

FIGURE 5 is a detail perspective view of the locking end of a curtain rod which is fastened to a chain raceway.

FIGURE 6 is a detail end elevation of the construction shown in FIGS. 1–3.

FIGURE 7 is a perspective view, illustrating a modified form of trim supports.

FIGURE 8 is a fragmentary top plan view of the trim support shown in FIG. 5, with the trim in dotted lines.

FIGURE 9 is an end elevation of the support shown in FIGS. 5 and 6.

Similar reference characters designate the corresponding parts throughout the several figures of the drawing.

As will be seen from FIGURE 1, the main support rail or lintel bar A is of angular cross section and includes a top horizontal wall 1 having a stiffener bead 2 medially thereof, while the front edge is bent or doubled upon itself to provide a reinforcing bead for adequately supporting all of the operating mechanism for a screen S, as well as the trim T. The doubled-over portion 3 terminates in a vertical wall 4.

Referring to FIGS. 1 and 6, it will readily be seen that the trim T includes a lower channel 5 adapted to embrace the lower edge of the vertical wall 4 and a central masking portion provided with an upper resilient clamping flange 6 having a groove 7 to snap over the bead 3 and secure the trim in place.

The medial portion of the bottom face of the wall 1 has the flat body portion 8 of a primary bracket B secured thereto. This bracket has a pair of spaced downturned curtain rod receiving legs 9, 10, and a third turnbuckle-supporting leg 11. The said legs 9 and 10 are offset laterally to slidably support the inner ends of the parallel spaced curtain rods 12 and 13 in overlapping relation in the same horizontal plane.

Chain raceway members R and R′ are of angular formation and each includes a vertical flange 14 or 15, respectively. The flange 14 has a vertical right angularly disposed wing 14*a* having chain grooves and is spot welded to the inner face of vertical wall 4 of the lintel bar. The flange 15 has the horizontal wing 15*a* also provided with chain grooves and is spot welded to the bottom face of the horizontal wall 1. Thus, both raceway members are fixed to the lintel bar A.

The outer ends of the rods 12 and 13 are fixed in openings 12*a* and 13*a* in the rearwardly extending flanges 14, 15, of the angular chain raceway members R and R′. Each rod is provided with a pin receiving hole *a* near its outer end and is also provided inwardly thereof with a swedged portion *b* so that in assembling the rods in the flanges, each rod has its inner end first slid into the opening of its related leg 9 or 10, and then moved into the opening in the flange of its related angular chain race member until the said swedged portion engages one side of the opening and the hole is exposed at the other side to receive a pin *c*. In this way, the curtain rods 12 and 13 are held against longitudinal movement so that when the curtains (not shown) are opened and closed by pulling the conventional chains, the rods will not shift longitudinally.

Referring again to the bracket B and its medial depending third flange 11, it will be seen from FIG. 1, for example, that its opening 16 supports the plain unthreaded portion of a turnbuckle D. This turnbuckle has a radial manipulating handle 17, and its opposite end portions are threaded as indicated respectively at 18 and 19. These threads engage in threaded nuts 18*a* and 19*a* so that when the handle 17 is manipulated, the nuts will be retracted or extended, according to the direction in which the handle 17 is rotated.

The nuts 18*a* and 19*a* are secured in non-circular members such as the channels 20 and 21, preferably by swedging, and the outer ends of the latter pass between the inwardly extending horizontal flanges of the related U-shaped clips 22 whose web portions are carried by the back of the channel shaped masonry anchors 23. The clips 22 pass through related rectangular openings D in the vertical flanges of the chain races R and R′.

The laterally and outwardly extending web of each anchor 22, 23 is forked as indicated at *x* to engage a

related end of a curtain rod 12 or 13 as it projects through the flanges 14 or 15. With this feature, it is impossible for the masonry anchors 22 and 23 to turn or twist from their intended positions so that force of considerable magnitude can be applied to secure the screen support in place.

Referring to FIGS. 7–9, inclusive, it will be seen that the masonry anchors 26 and 27 are connected to opposite ends of a channel member 28 by individual turnbuckle screws 30–31 operating in nuts 30*a* and 31*a*. The outer ends of the anchors are provided with vertically adjustable screws 32 and 33 which pass through the flanges of the channels where they are held by lock nuts 35, and the upper end of the screws are longitudinally slotted as indicated at 34.

As shown in FIGURES 8 and 9, these screws may be adjusted upwardly or downwardly with respect to the masonry engaging members 26 and 27 to receive the flange 36 of the trim member T', shown in dotted lines in FIGS. 8 and 9.

In this form of the invention, the lintel assembly is not required. That is to say, the channel member 28 upon being rotated in one direction will force the masonry anchors 26 and 27 into the sides of the fireplace masonry, and upon being turned in the other direction will contract the channel members to dismount them.

We claim:

1. In a fireplace screen support,
a lintel bar of angular cross section providing a horizontal top wall and a vertical wall having a stiffener bead at their junction,
a bracket secured to the bottom face of the horizontal top wall,
a pair of downturned legs on said bracket and laterally offset in a horizontal plane with respect to each other and each having an opening,
curtain rods having their inner ends slidable in said openings,
a third downturned leg offset laterally toward the rear of the support, and also having an opening, a turnbuckle rotatably supported in the opening of said last mentioned leg and having threaded portions,
extendable and retractable members having nuts fast thereto and engaging said threaded portions,
angular chain race members each including a vertical flange secured to said extendable and retractable members,
and masonry anchors connected to each of said vertical flanges.

2. In a fireplace screen support according to claim 1, wherein the extendable members are non-circular and the vertical flanges of the chain race members have non-circular openings to receive a clip connected with said expandable members and also have other openings to receive the ends of said rods.

3. In a fireplace screen support according to claim 1, wherein the masonry anchors are of channel shape and have a forked extended web to engage said curtain rods.

4. In a fireplace screen support according to claim 1, wherein the channel shaped masonry anchors have the edges serrated to firmly grip the fireplace sides.

5. In a fireplace screen support according to claim 1, wherein,
the lintel bar includes a front wall and a rearwardly extending top wall formed with an upstanding bead at their junction,
and a trim member including a vertical wall for masking the front wall of the lintel bar and having an upturned flange for embracing the lower edge of said bar and also having a flat upper resilient flange formed with a groove at the junction of said front wall and flange to interlock with said bead.

6. In a fireplace screen support,
a pair of outwardly facing channel shaped masonry anchors,
turnbuckle means for extending and contracting said masonry anchors,
means secured to said anchors and turnbuckle means for masking and concealing said anchors and turnbuckle means from the room side of said support,
said means comprising a lintel bar of angular cross section providing a horizontal top wall and a vertical wall having a stiffener bead at their junction,
screen supporting means secured to said lintel bar,
and a trim member snap-fitted over said lintel bar and including a vertical wall for masking the front wall of the lintel bar, said trim member having an upturned flange for embracing the lower edge of said bar and also having a flat upper resilient flange formed with a grove at the junction of said vertical wall and flange to interlock with said stiffener bead.

References Cited in the file of this patent

UNITED STATES PATENTS

2,562,371	Shannon	July 31, 1951
2,604,157	Gaetano	July 22, 1952
2,644,191	Meyer	July 7, 1953
3,077,923	Hatcher	Feb. 19, 1963
3,103,280	Brunig	Sept. 10, 1963

FOREIGN PATENTS

597,572	Canada	May 10, 1960